

## APPENDIX B.5

### CHRONOLOGIC SUMMARY OF CONSTRUCTION AND DREDGING IN THE ST. LAWRENCE RIVER

The opening paragraphs of this section of the Appendix presents brief summaries of specific historical Canadian canals of the St. Lawrence River. This is a departure from the format of Appendix "B"; however, it is felt that this historic information would be of interest to the reader. The write-ups were readily available in and taken verbatim from a report entitled "History of Canals and Related Subjects", dated September 1949, prepared by the then Department of Transport, General Engineering Branch, Ottawa, Canada. These historic St. Lawrence Canals provided, at the time, a depth of 14 feet for navigation from Montreal to Lake Ontario. They were comprised of the following:

- Lachine Canal - Montreal to Lake St. Louis;
- Soulanges Canal - Lake St. Louis to Lake St. Francis;
- Cornwall Canal; and
- Williamsburg Canals:
  - Farran Point Canal;
  - Rapide Plat Canal; and
  - Galop Canal.

#### LACHINE CANAL

This canal, which lies across the south-easterly portion of the Island of Montreal, overcomes the difference in level between the Harbour of Montreal and Lake St. Louis caused by the Lachine Rapids, the first obstruction to navigation met with on the St. Lawrence route. It is 8.74 miles in length, has 5 locks with a total rise of lockage at mean stage of about 46 feet.

Efforts to surmount the Lachine Rapids by means of a canal were first made in the early years of the 18th century. Owing to lack of funds, however, this original project was never completed. The present canal, or one lying along the same route, was constructed between the years 1821 and 1824. It had seven locks and accommodated vessels of 4-1/2 feet draught. In 1843 an enlargement was commenced which, completed in 1848, provided larger and deeper locks with 9 feet of water. In 1885 another enlargement was completed and the present canal with five locks 270 feet by 45 feet having 14 feet of water on lock sills was opened for traffic.

### LACHINE RAPIDS HYDRAULIC AND LAND CO.

Controlled and operated by Montreal Light, Heat and Power Consolidated. Plant is located on the north shore of St. Lawrence River at Lachine Rapids and operated under an average head of 14 feet. Installation, turbines - total, 15,800 h.p.; generators total, 9,760 k.v.a.

### SOULANGES CANAL

This canal was built to replace the Beauharnois Canal and to provide 14 ft. navigation from Lake St. Louis to Lake St. Francis. It is 14 miles long. There are four lift locks, and one guard lock. The total rise of lockage is about 84 feet.

### CASCADES, SPLIT ROCK AND COTEAU DU LAC CANALS

These canals were built by the Royal Engineers on the north shore of the St. Lawrence River to carry navigation from Lake St. Louis to Lake St. Francis.

### OLD BEAUHARNOIS CANAL

The Beauharnois Canal was built to provide 9 ft. navigation from Lake St. Louis to Lake St. Francis. It lies on the south side of the river, some distance inland. It is 11-1/4 miles long, and overcame a difference in level of approximately 82-1/2 feet. There were 8 lift locks and one guard lock.

### CEDAR RAPIDS MANUFACTURING AND POWER CO.

Controlled and operated by Montreal Light, Heat and Power Consolidated. Plant is located at Cedar Rapids on St. Lawrence River and operates under an average head of 30 ft.

Installation-

Turbines- 12 - 10,300 h.p.-	123,600 h.p.
6 - 11,300 h.p.-	<u>67,800 "</u>
Total	191,400 h.p.

Generators-	Total:	180,000 k.v.a.
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### CORNWALL CANAL

This canal was built to pass the Long Sault Rapids and extends from the Town of Cornwall to the village of Dickenson's Landing. It is 11.0 miles in length.

(Calendar Years 1700-1875, Fiscal Years thereafter)

Calendar Years	<u>Note:</u> No construction and/or dredging information found for those years not listed.
1700 to 1733.	Lachine Canal: A partial canal, known as the "Casson Canal", was built under the French regime about half way between Montreal and Lachine; 1 mile long with a 2-1/2 ft. depth of water.
1779 to 1783.	Cascades, Split Rock and Coteau Du Lac Canals: Four canals were built in this section of the river as follows:  At the Cascades; canal and lock at the Faucille. At the Cascades; canal and lock at the Trou du Moulin. At the Cascades; lock at Split Rock. At Coteau du Lac; canal and two locks.  These canals had a depth of 2-1/2 ft. on the mitre sills with locks 6 ft. wide.
1804.	Cascades, Split Rock and Coteau Du Lac Canals: The canals at the Faucille and the Trou du Moulin were replaced by a new canal cutting across Cascades Point.
1807.	Beauharnois Light, Heat & Power Co.: St. Louis Feeder canal built by Edward Ellice.
1817.	Cascades, Split Rock and Coteau Du Lac Canals: The locks on the several canals were widened to 12 ft. and the depth on the mitre sills increased from 2-1/2 ft. to 3-1/2 ft.
1821.	Lachine Canal: Work on the first canal commenced on July 17.
1824.	Lachine Canal: The canal opened in August; breadth at the bottom 28 ft.; at the water surface, 48 ft. in earth and 36 ft. in rock; depth of water 5 ft; seven locks (100 ft. by 20 ft.).
1833.	Cornwall Canal: A commission was appointed to investigate navigation from Cornwall to the head of Long Sault Rapids; recommended construction of Cornwall Canal, locks to be 200 ft. by 55 ft. with 9 ft. of water on mitre sills; canal to be 100 ft. wide on bottom with 2:1 side slopes. The recommendation was adopted and approved by Legislature.
1834.	Cornwall Canal: Tenders received for work on July 6, 1834 and work commenced.

1838. Cornwall Canal: Work was suspended, due to financial embarrassment.
1842. Old Beauharnois Canal: Construction commenced.
- Cornwall Canal: Work was resumed by the Public Works Department and the first boat passed through in December 1842.
1843. Cornwall Canal: Canal formally opened in June 1843; locks 200 ft. by 55 ft. with 9 ft. of water on sills; canal 100 ft. wide on bottom.
- Lachine Canal: Work on its enlargement commenced.
1844. Farran Point Canal: Actual construction of the Farran Point Canal commenced in 1844.
- Rapide Plat Canal: In 1844, construction of the canal commenced.
- Galop Canal: Work commenced in 1844 on two separate canals; the Iroquois canal, 3 miles long with one lock, and the Galop Canal, 2-1/4 miles long with two locks.
1845. Cascades, Split Rock and Coteau Du Lac Canals: These canals were superseded by the Beauharnois Canal. The fall in the river at mean stage adjacent to the Canal lands was as follows:
- |                      |            |
|----------------------|------------|
| Coteau du Lac Canal; | 7.2 feet   |
| Split Rock Canal;    | 4.3 feet   |
| Cascades Canal;      | <u>Nil</u> |
| Total                | 11.5 feet  |
- Old Beauharnois Canal: Canal completed; 30 ft. wide on bottom, 120 ft. at water surface; nine locks 200 ft. by 45 ft. and 9 ft. of water on sills.
1846. The Galop Canal was completed in November 1846.
1847. Rapide Plat Canal: Canal was completed in October 1847; lock 200 ft. by 45 ft. with 9 ft. of water on mitre sills; canal prism 50 ft. wide on bottom; locks 24 and 23 opened for traffic.
- Farran Point Canal: Completed in October 1847; lock 200 ft. by 45 ft. with 9 ft. of water on mitre sills; canal prism 50 ft. wide on bottom.
- Galop Canal: The Iroquois Canal was completed in September 1847.

1848. Lachine Canal: The canal was opened in the spring; 80 ft. wide on bottom, 120 ft. wide at water surface, 100 ft. wide with nearly vertical sides through rock cut below Lachine; five locks (200 ft by 45 ft.), locks No. 1 and 2 at Montreal - 16 ft. of water on sills, the remainder, 9 ft.; 4,650 ft. pier at Lachine.
1849. Old Beauharnois Canal: Valleyfield dam built; closed in November 1849.
- Cornwall Canal: The upper entrance was dredged and completed.
1850. Cornwall Canal: 300 ft. of the south bank at Moulinette was washed out on October 29, 1850; navigation was suspended for 12 days.
1851. Galop Canal: In order to raise the water level in the Iroquois Canal, it was decided to connect this canal with the Galop Canal; a contract was let in 1851.
1856. Montreal Aqueduct: Montreal Aqueduct completed; entrance 2,500 ft. below present entrance.
- Old Beauharnois Canal: Hungry Bay Dyke completed.
- Galop Canal: The Galop Canal, comprising of the Iroquois, Galop and Junction Division was completed in 1856; 3 locks, Locks 25, 26 and 27, 200 ft. by 45 ft. with 9 ft. water on sills; canal prism 50 ft. wide on bottom.
1860. Cornwall Canal: The deepening of the canal to give 10-1/2 ft. on the mitre sills an 11-1/2 ft. between locks was recommended by Chief Engineer of Public Works.
1863. Galop Canal: Dredging at lower entrance Lock 25.
- Montreal Aqueduct: Tailrace excavated from wheel-house to river.
1867. Old Beauharnois Canal: The fall in the river at mean stage adjacent to Canal lands, which were vested in the Crown in the right of the Dominion previous to the construction of the Valleyfield Dams in 1849, was equal to the fall in the south channel from the head of the canal to the location of the Valleyfield Dams and was about 9 ft.. The construction of the dams decreased this fall to about 0.3 ft., dependent on the flow through the dams.
- In the south channel of the river below the town of Valleyfield, there was a fall of 3.1 ft. adjacent to canal lands vested in the Crown.
- Cornwall Canal: Confederation - The fall in the river at mean stage adjacent to Canal Lands, which were vested in the Crown in the right of the Dominion at the date of

Confederation, was as follows:

Head of Canal at Dickenson's Landing to head of Sheek's Island (200.6 - 182.8): 17.8 ft.

Head of Sheek's Island to above Old Mille Roche (182.8 - 169.6): 13.2 ft.

2,430 ft. above Lock 20 to 1,600 ft. below Lock 20 (162.0 - 160.9): 1.1 ft.

820 ft. above Lock 19 to 1960 ft. below Lock 19 (158.6 - 158.2): 0.4 ft.

3,410 ft. above Lock 18 to 740 ft. below Lock 18 (158.0 - 156.9): 1.1 ft.

220 ft. above Pitt Street in Cornwall to 560 ft. below Pitt Street (154.3 - 154.2): 0.1 ft.

Total 33.7 ft.

Farran Point Canal: Confederation -The fall in the river at mean stage adjacent to canal lands, which were vested in the Crown in the right of the Dominion at the date of Confederation, was about 4 ft.. This was equivalent to the total rise of lockage at that time.

Rapide Plat Canal: Confederation -The fall in the river at mean stage adjacent to canal lands, which were vested in the Crown in the right of the Dominion at the date of Confederation, was 11.6 ft.. This was equivalent to the total rise of lockage.

Galop Canal: In 1867 the conditions existing at the various locks were as follows:

Iroquois, South lower entrance; 50 ft. long  
Iroquois, North lower entrance; 340 ft. long  
Lock 27, South upper entrance; 450 ft. long  
Lock 27, North upper entrance; 650 ft. long

Galop Canal: Confederation -The fall in the river at mean stage adjacent to Canal Lands, which were vested in the Crown in the right of the Dominion at the date of Confederation, was as follows:

Head of Galop Canal to above Presqu' Isle (243.60 - 234.20): 9.4 ft.  
Below Presqu' Ile Pt to above Iroquois Pt. (232.20 - 232.10): 0.1 ft.  
Total: 9.5 ft.

The total rise of lockage at mean stage of the river was 15.05 ft.

1868. Cornwall Canal: Contracts No. 3186 and 3187, December 25, 1868, let for 350 ft. addition to upper entrance pier at Lock 21, also for a waste weir near Lock 17, was completed in 1869.
- Rapide Plat Canal: Some dredging was done in the canal prism.
1869. Cornwall Canal: The extension of the upper entrance and weir at Lock 17 was completed; dredging was accomplished above Lock No. 20.
- Farran Point Canal: Some dredging done in canal prism.
1870. Lachine Canal: Work commenced on the building of a new weir at Lachine, on Sept. 10th.
1871. Beauharnois Light, Heat and Power Co.: Rights of Edward Ellice acquired by Joe Robert.
- Cornwall Canal: Dredging below Lock 21.
- Lachine Canal: Supply weir at Lachine was completed on November 7.
1872. Cornwall Canal: Dredging below Lock 21.
- Lachine Canal: Work commenced in September on straightening and deepening the channel of the St. Pierre River, which is carried under the canal, from the canal eastward about 500 ft. and westward about 6,600 ft.. The breastwall of the culvert was lowered.
1873. Lachine Canal: A contract was let in September and work commenced on the construction of two new locks (270 ft. by 45 ft.) at the lower entrance; 18 ft. of water on sills. Also, construction of the Wellington basin to be 19 ft. deep.
1874. Rapide Plat Canal: The enlargement of this canal was recommended based upon a report of John Page, Chief Engineer of Public Works; July 9, 1874.
- Lachine Canal: Work of the St. Pierre River was completed in November.
- Cornwall Canal: A report of John Page, Chief Engineer of Public Works, on the navigation of the St. Lawrence River, July 9, 1874, treated particularly on the question of deepening the St. Lawrence Canals to give 12 feet of water on the mitre sills of the locks and 13 feet in the stretches between, recommended placing Lock 21 about one quarter mile above the then existing lock.

Farran Point Canal: An enlargement of the canal was recommended in a report of John Page, Chief Engineer of Public Works, July 9, 1874.

1875. Lachine Canal: Tenders called for the enlargement of the remaining section of the canal.

Section No. 1; two lower locks; contract was let in September 1873.

Section No. 2; Wellington Basin and Basin No. 2; let September 1873.

Fiscal

Years

(unless noted CY calendar years)

1876. Improvement of Ogdensburg Harbor: The channel was deepened to 12 ft. along the St. Lawrence River in front of the city and across the bar northeast of lighthouse; work completed.

Waddington: Work continued on the deepening of a proposed channel below the dam.

Survey of Effects of Dredging Galop Channel: Canadian Government engaged in the deepening of the channel at Galop Rapids (7 miles below Ogdensburg); present depth is 7 ft.

1876 CY. Lachine Canal: Tenders called for the enlargement of the remaining sections of the canal.

Section No. 3; below Wellington St. Bridge to above St. Gabriel Lock, 4,200 ft.; work started January 1876.

Section No. 4; St. Gabriel Lock to above Railway Bridge, 3,800 ft.; work started in June 1876.

Section No. 5; Railway Bridge to below Cote St. Paul Lock, 4,200 ft.; work started in June 1876.

Sections Nos. 6 and 7; Cote St. Paul Lock, 10,000 ft. west; work started in June 1876.

Section No. 8; 7,500 ft.; work started in June 1876.

Section No. 9; 6,000 ft. to below Guard Lock; work started in February 1876.

Section No. 10; Guard Lock to River entrance, 1,400 ft.; work started in February 1876.

Section No. 11; river entrance and new harbour at Lachine including entrance pier, 6,200 ft.; work started in June 1876.

Wellington Basin to Cote St. Paul Lock, 200 ft. wide; Cote St. Paul to Lachine, 150 ft. wide.

Locks 3, 4 and 5; 270 ft. by 45 ft. with 14 ft. of water on sills.



Excavation from Section No. 1 deposited in the river to strengthen embankment.

New Upper entrance to consist of a line of pier work about 6,200 ft. in length.

1877. Galop Channel: The current least depth is 10 ft.; proposed a depth of 16 ft. for a width of 200 ft. and a length of 1,800-3,300 ft.; three limestone reefs dredged.

Cornwall Canal: Contract let August 23, 1876 for the enlargement of Section 1, to Messrs. Gordon, Woodward and Chamberlain; work consisted of 2 locks, 270 ft. by 45 ft. with 14 ft. of water on mitre sills, regulating weir and the building of a new lower entrance; water level between locks 17 and 18 to be raised 2 ft. and the descent to the river level to be made by the two locks.

- 1877 CY. Lachine Canal: First cribs at upper entrance were placed in August; deepening of upper entrance carried on.

Montreal Aqueduct: A new entrance was built 2,500 ft. above the original entrance.

- 1878 CY. Lachine Canal: Section No. 4 completed on May 21, 1878.

Cornwall Canal: Supply weir completed.

- 1879 CY. Galop Rapids Channel: A contract was let to dredge the Galop Rapids Channel; 200 ft. wide and 3,300 ft. long, to give 16 ft. of water when 9 ft. on sill of Lock 27. This channel extended from the head of Adam's Island East.

Lachine Canal:

Section No. 5 completed in May.

Section No. 6 and 7 completed in June.

Section No. 8 completed in May.

Section No. 9 completed in May.

Section No. 10 completed in May.

Sections Nos. 1 and 2 completed in November.

1880. Galop Rapids Channel: Commenced drilling and blasting of an Island Shoal for a new channel through the rapids.

- 1880 CY. Lachine Canal: Section No. 3 completed.

1882. Cornwall Canal: Gordon, Woodward and Chamberlain contract completed in October 1881.

Galop Rapids Channel: Contract of 1879 transferred to a second contractor, on June 30, 1882.

1882 CY. Lachine Canal: Work commenced, on June 27, on the extension of the Lachine Wharf; to be extended upstream on its present alignment 320 ft.; completed on December 18.

1883 CY. Lachine Canal: Section No. 11, completed and new lock and entrance at Lachine opened for use on June 1.

1884. Galop Canal: Work began in March to deepen the upper entrance of the canal, (contract No. 7342, March 13, 1884).

Cornwall Canal: Contract No. 7355, April 7, 1884, let to construct a lock and supply weir and deepen and enlarge the upper entrance of the Cornwall Canal; Section 10 to be deepened to 14 ft; Lock 21 located 1,600 ft. west of old lock, work commenced (completed 1895).

Rapide Plat Canal: Contract No. 7337, April 2, 1884, let for lock and weir, to enlarge and deepen upper entrance; Section 4, new Lock 24, placed north of old lock, upper gates directly opposite one another, new north upper entrance pier extended 200 ft. west of old; weir placed at head of old lock 24; channel excavated from 700 ft. above lock to 1,000 ft. below. Contract completed in 1891.

1885. Galop Canal: Contract No. 7342 transferred from one contractor to another on April 29, 1885, Contract No. 7793 (completed 1888).

1886 CY. C.P. Rly. Bridge at Lachine: First bridge built.

1887 CY. G.T. Rly. Bridge at Coteau Rapids: Bridge over Coteau Rapids built 1887-1889.

Farran Point Canal: An ice bridge formed for Croil Island to Canadian and American shores. Damage was done to an ice breaker located at the foot of the canal.

1888. Galop Rapids Channel: Second contractor, completed work.

1888 CY. Rapide Plat Canal: New Lock 24 completed and put in operation.

1889. Galop Canal: Contract No. 9591, November 14, 1888, let to construct locks and deepen upper entrance of Galop Canal. Guard lock replaced by new Guard Lock, and also a new lift lock put in to give access to river. Both locks placed about 2,000 ft. east of old Lock 27. This contract practically completed in 1895, but not completed

until 1907. Work commenced on May 22, 1889. About 1885 ft.<sup>2</sup> of cribwork sank on the river side line of the new embankment.

Cornwall Canal: Contracts No. 9558, 9560 and 9562, November 5, 1888, let for the enlargement of Sections 2, 3 and 4 (completed 1889); Section No. 2 included Lock No. 18; Section No. 3 Lock No. 19; and Section No. 4 Lock No. 20.

Cornwall Canal: Contracts No. 9564, 9566, 9568 and 9570, November 2, 1888, let for the enlargement of Sections 5, 6, 7 and 8, (Section 8 adjoins Section 10) (completed 1897).

Cornwall Canal: October 11, 1888, navigation suspended for 5 weeks, due to a break of 300 ft in the south bank between Moulinette and Mille Rockes.

Cornwall Canal: Contract 9785, March 1, 1889, let for strengthening the south bank of the canal, which was broken in 1888.

1889 CY. Rapide Plat Canal: Removal of shoal at outer side of upper entrance formed by dumping.

1890. Shoals exist between Sister Island and Crossover Light and between Ogdensburg and the foot of Lake Ontario. Also, the original condition of the St. Lawrence River channel for 11 miles, extending from the Sister Island Light to the head of Brockville Narrows (15 miles above Ogdensburg), was obstructed by 12 shoals (ledges) with depths varying from 9-1/2 to 16 ft.

Project 1890: Remove to 18 ft., the Blind Bay, Dark Island and Haskell ledges, between Sister Island and Crossover Light.

Rapide Plat Canal: Tenders called for the enlargement of Sections 1, 2 and 3, on July 23, 1890. No awards were made and new tenders were invited.

1890 CY. Cornwall Canal: Lock 21 completed, but not put into use.

1891. Galop Canal: Guard lock completed.

Cornwall Canal: Lock 21 put into use.

Rapide Plat Canal: Contract No. 10660, January 12, 1891, let for the enlargement of Section 2 (completed 1895). Contract No. 10664, January 26, 1891, let for the enlargement of Section 1; Lock 23 placed south and about 100 ft. west of old Lock 23; new north lower entrance pier placed about 80 ft. south of old and extended about 50 ft. downstream; weir placed across old lock, (completed in 1896). All of the above

work commenced. Contract of April 2, 1884, completed. Contract No. 10666, January 26, 1891, let for the enlargement of Section 3 (completed 1895).

1891 CY. Lake St. Louis: Some excavation (6,000 cu. yds.) was done in the Lake St. Louis channel. This material was deposited partly on the entrance pier and partly on the Lachine Wharf.

1892. Galop Canal: Lift lock completed.

1892 CY. Soulanges Canal: First work on construction started.

1893. Galop Canal: Contract No. 11529, April 7, 1893, awarded for additional masonry etc. guard lock.

Project 1890: Modified to remove Spurs of Haskell Shoal.

Cornwall Canal: Contract No. 11290, August 25, 1892, awarded to widen to 100 ft. and deepen to 16 ft. the canal prism of Sections 2,3 and 4 and straighten Section 2 (completed in 1898). Work on Sections 6 and 7 was suspended awaiting a decision on Sheeks Island Dams.

Cornwall Canal: Contract No. 11556, June 19, 1893, let for the construction of Sheeks Island Dams (completed 1898).

1894. Improving shoals between Ogdensburg and the foot of Lake Ontario.

1894 CY. Cornwall Canal: New Locks 18, 19 and 20 were brought into use.

1895. Galop Canal: Both Locks 27 and 28 completed.

Cornwall Canal: Work on Section 10 (Contract No. 7355 of April 7, 1884) completed; Sheeks Island Dams completed. Contract No. 12175, October 26, 1895, let to reconstruct superstructure of south pier and ice breaker at upper entrance (completed 1896).

Lake St. Louis: A contract was let, on October 1, for the excavation of a channel in Lake St. Louis; channel about four miles long, 300 ft. wide and 16 ft. deep.

1895 CY. Rapide Plat Canal: Contracts 10660 and 10666 (Sections 2 and 3) completed.

Lake St. Louis: Dredging in Lake St. Louis commenced.

Lachine Rapids Hydraulic and Land Co.: Construction started in the fall.

1896. Galop Canal: Old Guard Lock 27 was abandoned and the new one was brought into use; Lock 28 was opened for traffic in October 1895.

Continued to improve shoals between Ogdensburg and the foot of Lake Ontario. Haskell Shoal and spurs, five small shoals and Blind Bay Shoal removed to 18 ft.; 1,378 cu. yds. of rock excavated.

Galop Canal: The upper pier extension was completed.

Massena Power Canal: Incorporation of the St. Lawrence Power Co., May 9, 1896.

Farran Point Canal: Contract No. 12108, August 1, 1895, let to renew part of the superstructure of the north pier, lower entrance.

1896 CY. Cornwall Canal: Contract No. 12175 of October 26, 1895, completed.

Rapide Plat Canal: Contract 10664 (Section 1) completed; Lock 23 was put into commission on July 24, 1896.

1897. Galop Canal: Contract No. 12605, December 14, 1896, let to dredge and deepen canal prism to original dimensions; i.e., 50 ft. on bottom and 10 ft. depth from Lock 26 to eastern end of upper entrance contract.

Dark Island Shoal to Blind Bay Shoal: Removed to 18 ft.

Galop Rapids Channel: Operations commenced in November to widen the channel to 300 ft.

A survey of the 12 shoals (ledges) for 18 ft. depth conducted.

North Channel: Contract let to improve the North Channel between the head of the Galop Canal and Prescott.

Farran Point Canal: Contract No. 12458, July 31, 1896, let to dredge and deepen Farran Point Canal to original width of 50 ft. on bottom and 10 feet deep (completed 1897).

Farran Point Canal: Contract No. 12769, June 1, 1897, let to deepen, straighten, enlarge and extend the prism of the canal and to construct a new lift lock, entrance piers, etc; lift lock 800 ft. by 50 ft. with 16 ft. of water on mitre sills; canal prism 80 ft. wide at bottom; new lock to be located north of the old lock and canal extended about 1,700 ft. upstream through Point Avoyon to Empey's Bay. North Lower entrance extended about 900 ft. The contract was completed in 1901.

1897 CY. Cornwall Canal: Contracts of November 2, 1888, for Sections 5, 6, 7 and 8, completed.

1898. The construction of a bridge near Hogansburg was approved, in August 1897.

Galop Canal: Contract No. 12756, May 20, 1897, let to deepen, strengthen and enlarge the Iroquois Section; included new Lock 25 (800 ft. by 45 ft. with 14 ft. of water on mitre sills); also, entrance piers. New Lock 25 placed about 250 ft. west and 200 ft. south of old lock. Water level above Lock 25 to be raised to height of lowest known stage above Guard Lock 27 and Old Lock 26 to be abandoned (contract completed November 1902). Contract No. 12758, May 10, 1897, let to enlarge the Cardinal Section from Presqu' Ile Pt west, North Line (contract completed August 25, 1904).

Upper End of Lake St. Francis: Contract No. 13168, May 24, 1889, let to improve channel in Hamilton Island; section of Lake St. Francis 10-11 miles east of Hamilton Island light; work commenced in June 1898. Contract No. 13170, May 24, 1889, let to improve channel in St. Regis Section from the foot of Cornwall Island to First Crab; work commenced in June 1898.

Galop Rapids Channel: Contract let on September 15, 1897, to survey and remove obstructions on the bottom of the Galop Rapids Channel.

Shoals between Sister Island and Crossover Light and between Ogdensburg and foot of Lake Ontario: Seven shoals were excavated to 16-1/2 ft. prior to Fiscal Year 1898; in this Fiscal Year the Dark Island Shoal was excavated to 18 ft.; 3,412 cu. yds. of material excavated and the Blind Bay Shoal was excavated to 18 ft., 150 cu. yds. excavated.

1898 CY. Old Beauharnois Canal: Work commenced on St. Barbe Dyke.

Cornwall Canal: Contracts of November 5, 1888, for Sections 2, 3 and 4, completed; contract of August 25, 1892, completed; contract of June 19, 1893, completed; 14 ft. of water available in Cornwall Canal.

Lachine Rapids Hydraulic and Land Co.: Construction completed, eight 1,250 h.p. units.

1899. Galop Canal: New Lock 25 opened for traffic May 13, 1899.

1899 CY. Soulanges Canal: Canal practically completed; 100 ft. wide at bottom, 2:1 side slopes; five locks (280 ft. by 45 ft.); 15 ft. of water on sills.

Old Beauharnois Canal: The use of the canal was practically discontinued on the completion of the Soulanges Canal.

Cornwall Canal: Contract No. 13634, September 28, 1899, let for improvements at the upper entrance, consisting of cutting away of the shore on the north side of the canal for 3,000 ft., from 1,100 ft. west of Lock 21, including removal of the old wharf on the north side at the upper entrance. This was to give a channel 300 ft. wide for 1,500 ft. in the canal below the entrance pier. The excavated material was deposited on the outer or river side of the entrance piers; completed to below water level in September (contract complete in June 1902).

1900. Farran Point Canal: New Lock 22 put in use on September 6, 1899; embankment on south side of canal about completed and cribwork at upper and lower entrance well advanced.

Lachine Canal: Work on a new regulating weir at Lachine commenced in April.

Lake St. Louis: Lake St. Louis Channel completed in June.

Pilot Shoal was removed to 18 ft. below centerline at Ogdensburg gauge.

Four shoals near the lower end of Chippewa Point and one shoal east of Bay State Shoal were drilled and blasted; removal of debris began.

1900 CY. Galop Canal: Work at upper entrance practically completed; commenced widening canal north of McLaughlin's Point, in September.

Farran Point Canal: Upper south pier completed, except for stone filling at back of masonry superstructure.

Upper End of Lake St. Francis: Contract No. 13170, completed.

1901. Improvement between Ogdensburg and Foot of Lake Ontario: Four shoals dredged to 18 ft; all shoals in U.S. waters now removed; three shoals remained in Canadian waters.

North Channel: In July 1901, opened for traffic.

Provincial Light, Heat and Power Co.: May 1; Lease No. 14245 granted M.P. Davis the use of all surplus water from summit level of Soulanges Canal.

Rapide Plat Canal: Contract No. 13970, October 16, 1900, let to improve upper entrance, including extension of upper entrance pier, north upper entrance pier



removed; south upper entrance replaced by new pier extending 250 ft. further upstream and reaching further into river. Work commenced on April 17, 1901, (completed January 14, 1905). The cribwork for the entrance pier was completed in December 1901.

Lachine Canal: Weir at Lachine completed, May 13.

1901 CY. Old Beauharnois Canal: St. Barbe Dyke completed; 12,300 ft. long.

Farran Point Canal: Contract of June 1, 1897, completed.

Massena Power Canal: Permission received on July 10, from the U.S. Secretary of War, to dredge a channel 150 ft. wide by 18 ft. deep through the shoal or bar in the south channel of the river at the head of Long Sault Island. No work was done under this permit. Permission received August 30, from the U.S. Secretary of War, to build a jetty or dyke in the river at the entrance of the Power Canal. The dyke was built, but was removed and reconstructed under permit of August 3, 1903.

1901 to 1903 CY. Lachine Rapids Hydraulic and Land Co.: 1,200 ft. of submerged bank added onto the bank.

1902. North Channel: Spencer Island Pier completed.

Cornwall Canal: Contract of September 28, 1899 completed in June 1902. Contract No. 14414, February 8, 1902, let to widen and strengthen the north bank of the canal east of Pitt Street, Cornwall, (completed 1904).

1902 CY. Massena Power Canal: The property and rights of the St. Lawrence Power Co. where sold under foreclosure to Mark T. Cox. Incorporation of the St. Lawrence River Power Co., December 23, 1902. The Operation of the canal started.

Beauharnois Light, Heat & Power Co.: Incorporated by Quebec Statute.  
Rapide Plat Canal: Dredging in upper entrance.

Galop Rapids Channel: Work temporarily suspended, due to lack of funds.

Upper End of Lake St. Francis: Contract No. 13168, completed.

1903. Galop Canal: Contract of May 20, 1897 completed in November 1902.

Gut Dam: Plans were approved in January 1903 to improve navigation.



North Channel: Materials reserved in the lower sections of the North Channel were removed for the construction of Gut Dam. Cribbs in the North Channel placed and completed to normal water line, in October 1902.

- 1903 CY. Massena Power Canal: The property and rights of the St. Lawrence Power Co., acquired by Cox in 1902, was deeded to the St. Lawrence River Power Co. on January 13, 1903.

Permission was received on March 20, from the U.S. Secretary of War, to dredge a channel in the river through the shoal above the entrance to the power canal. No work was done under this permit. Permission was received on August 3, 1903, from the U.S. Secretary of War, to remove the dyke at the entrance to the canal and to rebuild it at a different location; this work was done. The existing dyke is 230 ft. long with coping at elevation of 205 ft.. Originally it contained 2 - 15 ft. sluices, but these have since been blocked up.

1904. Galop Canal: Widening of the canal at McLaughlin's Point was completed in October.

Galop Rapids Channel: Work to widen the channel resumed in June.

Gut Dam: Authority to proceed with work given on September 10, and actual work commenced on September 11, 1903; the Gut Channel was closed by rock dumps on November 11, 1903; cribwork all placed, by August 16, 1904.

Provincial Light, Heat and Power Co.: May 3; Lease 14245 assigned to Provincial Light, Heat and Power Co.

- 1904 CY. Cedar Rapids Manufacturing and Power Co.: Company incorporated (Chapter 65 to Statutes of 1904).

1905. Galop Canal: Contract of May 10, 1907, on Cardinal Section, completed on August 25, 1904.

Cornwall Canal: Contract of February 8, 1902, completed. Contract No. 15630, November 10, 1904, let to widen and enlarge the regulating weir at old Lock 17 (completed June 29, 1905). Contract No. 15629, November 7, 1904, let to widen and deepen the channel between the east end of the revetment wall and old Lock 17 (completed June 16, 1905). Contract No. 15671, November 26, 1904, let to improve the channel west of the upper entrance, included the removal of five shoals, viz, Wagner Island Shoal, Dawson's Point Shoal, Archibalds's Point Shoal, Markell's Point Shoal and Maxwell's Point Shoal (completed June 15, 1905).

Rapide Plat Canal: Contract of October 16, 1900 completed on January 14, 1905.

1905 CY. Cornwall Canal: Contracts of November 7, 1904, November 10, 1904 and November 26, 1904, completed.

Between 1884 and 1905 a canal building program was undertaken by Canada, which enabled ships with a 14 ft. draft to navigate from the Atlantic Ocean to Lake Superior.

1906. Galop Canal: Shoal in river below Lock 28 removed May 15 to June 5.

Gut Dam: Superstructure of dam completed.

Cedar Rapids Manufacturing and Power Co.: Plans of works approved by Order-in-Council, January 6, 1906.

1906 CY. Provincial Light, Heat and Power Co.: Plant installed with one 5350 h.p. unit.

1907 CY. Massena Power: Five small units were installed in the Powerhouse, replacing the old turbines.

Galop Rapids Channel: Work stopped in September 1906.

Galop Canal: Contract No. 16692, July 25, 1907, let to remove shoals in the river west of upper entrance, (completed September 15, 1909).

Gut Dam: Completed.

1907 CY. Massena Power Canal: Five small units were installed in the Powerhouse, replacing the old turbines.

1907 to 1909 CY. Montreal Aqueduct: Supply conduit placed in north bank of aqueduct; two intakes into river; one about 700 ft. from shore and one extending 1,200 ft. into the river.

1908. Old Beauharnois Canal: The canal was leased to the Canadian Light & Power Co. on January 1, 1908.

1908 CY. Cornwall Canal: 165 ft. of bank above Lock 18, as well as pivot pier and swing span of the Ottawa and New York Railway bridge, washed out on June 23, 1908. Temporary repairs allowed navigation to be resumed on July 10, 1908. Contract No. 17261, September 15, 1908, let to repair washout, work commenced under this contract on August 18, 1908 (completed October 9, 1909). Contract No. 17386,

November 18, 1908, let for trimming the north slope of the canal above Lock 21 (completed November 17, 1909).

1909. North Channel: Completed on October 1, 1908.

Cedar Rapids Manufacturing and Power Co.: May 28, 1909; agreement between Dominion (Dept. of P.W.) and Company; diversion limited to 350,00 imperial gallons per second. (56,000 c.f.s.)

1910. Galop Canal: Contract of July 25, 1907 was completed on September 15, 1909; to give 17 ft. of water between the upper entrance of Galop and lower entrance to North channel.

Beauharnois Light, Heat & Power Co.: December 9, 1909; Order-in-Council approved lease of feeder to Robert heirs; December 28, 1909, feeder leased to Robert heirs for 21 years.

Cornwall Canal: Contract of September 15, 1908 was completed on October 9, 1909. Contract of November 18, 1908 completed on November 17, 1909. Contract No. 18038, November 10, 1909; let to strengthen the south bank of the canal west of where washout occurred in 1908 for 465 ft. (completed July 29, 1910).

Cornwall Canal: Contract No. 18412, June 1, 1910, let to construct cribwork and concrete approach wall 660 ft. long at the north side of the upper entrance of Lock 17 (completed December 1911).

1910 CY. Beauharnois Light, Heat & Power Co.: Quebec Act giving Beauharnois Light, Heat & Power Company right to build new canal.

Montreal Aqueduct: Construction of river intake commenced; also, first enlargement commenced.

Lachine Rapids Hydraulic and Land Co.: Four 1,450 units added.

C.P. Rly. Bridge at Lachine: Extension to the piers of the bridge commenced in July; completed in December; four new piers built.

1911. Farran Point Canal: Contract No. 19107, May 22, 1911, let to extend north lower entrance pier 1,140 ft.

Galop Canal: Contract No. 19145, June 30, 1911, let to construct an approach wall 725 ft. long, south side of upper entrance to Lock 28; length later reduced by 200 ft.

Cornwall Canal: Contract No. 18565, August 30, 1910, awarded to remove certain high areas in the bottom of the canal, notable near the upper dam below Lock 21 (completed June 9, 1911).

1911 CY. Cornwall Canal: Contract of June 1, 1910 was completed in December 1911.

Cornwall Canal: Contract No. 19104, May 30, 1911, let to extend the short approach wall on the north side of the upper entrance to Lock 19, was completed on December 6, 1911; Contract of August 30, 1910, completed.

Rapide Plat Canal: Contract No. 19146, July 3, 1911, let to remove high areas in the canal (completed October 29, 1911). Contract No. 19202, September 2, 1911, let to widen and straighten the canal immediately below Lock 24, and to construct the approach on the north side lower entrance to Lock 24.

Soulanges Canal: A contract was let on October 26, for the construction of an extension 1,200 ft. long of the guard pier at Coteau and a breakwater 600 ft. long above this extension.

1912. Cedar Rapids Manufacturing and Power Company: Construction started.

Cornwall Canal: Contract No. 19486, June 4, 1912, let to remove 300 ft. of the old north entrance wall below Lock 15 and to construct 570 ft. of a new wall in a new location; also, to tear down and rebuild the south entrance wall (completed June 1914).

1912 CY. Montreal Aqueduct: Contract let for first enlargement, cancelled.

Soulanges Canal: Dredging in upper entrance commenced.

Massena Power Canal: The canal was widened and 8 additional units were installed.

1912 C.P. Rly. Bridge at Lachine: New superstructure built.  
to  
1913 CY.

1913. Galop Canal: Contract of June 30, 1911 completed on October 26, 1912.

Farran Point Canal: Contract of May 22, 1911, completed.

1913 CY. Montreal Aqueduct: Second enlargement commenced.

1914. Cornwall Canal: Contract No. 20488, December 31, 1913, let to remove 100 ft. of the old lower entrance cribwork of Lock 20 and to construct a 200 ft. concrete entrance wall in its place (completed May, 1914).

1914 CY. Montreal Aqueduct: Connection made with the Lachine Canal above Atwater Avenue.

Cedar Rapids Manufacturing and Power Co.: Plant was ready for operation in December; 9 main units; vertical shaft runners 17 ft. by 7 in. in diameter; 10,800 h.p. under 30 ft. head at 55.6 r.p.m.; designed for 18 units; auxiliary units 3 - 1,500 h.p. units at 150 r.p.m.

Cornwall Canal: Contract of December 31, 1913 was completed in May 1914; Contract of June 4, 1912, completed June 1914.

Cornwall Canal: Elevations at Lock 21, as determined in August 1922, in reference to U.S. Lake Survey 1903 adjusted levels, U.S. L.S.B.M. "C" Old Lock 10 were as follows:

Coping elevation at upper gates; 205.04 ft.  
Upper Mitre sill, 3 ft. from North wall; 184.53 ft.  
Upper Mitre sill, 3 ft. from South wall; 184.38 ft.  
Plank Gauge Zero; 184.55 ft.  
Top of Upper gate at mitre; 202.76 ft.

Equation connecting gauge of old lock to new lock -6.42.

NOTE: The gauge at Lock 21 was shifted from the old lock to the new lock in 1892; however, gauge readings were taken as showing depth on sill of old lock until July 1, 1905.

1915 CY. Soulanges Canal: Extension at upper entrance completed.

1916 CY. Provincial Light, Heat and Power Co.: Two 5350 h.p. units were added; provision made for one more unit.

#### Installation

Turbines	3 - 5350 h.p.	16050 h.p.
Generators	3 - 3750 k.v.a.	11250 k.v.a.

1917. Cedar Rapids Manufacturing and Power Co.: August 15, 1916; Order-in-Council allowed increase in diversion to 75,000 c.f.s. from November 20 to May 20 in each year.

1917 CY. Montreal Aqueduct: Contract for second enlargement, cancelled.

1918. Massena Power Canal: Permission was granted on September 10, 1917, by the U.S. Secretary of War, to construct an ice boom supported by 14 stone filled timber cribs in the south channel of the river, extending from Talcott's Point to Delaney's Island and to dredge a channel 150 ft. wide by 20 ft. deep from deep water at about 250 ft. above the boom to about 1,000 ft. below the boom. Work was started in October 1917, but discontinued after about six weeks. Permission was granted on September 10, 1917, by the U.S. Secretary of War, to extend to Long Sault Island by means of a submerged weir, the jetty or dyke in the South Sault at the head of the Power Canal. This was referred to the International Joint Commission on August 12, 1918.

1918 CY. Massena Power Canal: Dredging of Dodge's Shoal continued in April and was practically completed in August. Approval was granted on September 14, 1918, by the International Joint Commission, for the construction of the submerged weir and its maintenance until the expiration of the term of 5 years or until the termination of the war. Work on the weir commenced in October 1918.

Rapide Plat Canal: Rebuilding lower entrance pier Lock 23. Old pier removed to low water line and rebuilt with concrete outer walls, stone filled and floored with concrete. Work commenced in August 1918 and was completed in May 1919.

1919. Rapide Plat Canal: Work that commenced in 1918 was completed in May 1919; pier 500 ft. long and 25 ft. wide.

1920. Massena Power Canal: Weir was practically completed in October 1919.

Galop Canal: Contract let in July for the rebuilding, in concrete, of the timber portion of the lower entrance pier at Lock 25 (completed in October 1919).

1920 CY. Montreal Aqueduct: The Montreal Water Board was formed to enlarge, improve and complete the aqueduct.

Cornwall Canal: February -Work commenced on the Powerhouse for the Canadian Cottons Company and on the headrace from the canal; the headrace was completed in 1920.

Massena Power Canal: A washout occurred in the north end of the weir in April 1920; it was repaired by December 1920.

1922 CY. Montreal Aqueduct: Water was admitted at the completion of the Canal on December 24.

1923. Massena Power Canal: December 6, 1922; the St. Lawrence River Power Co. made an application to the International Joint Commission for a further continuance of the approval of the weir in the South Sault. Approval was granted for a further period of two years; i.e., until September 14, 1925 and thereafter until six months notice in writing either by the Government of Canada or by the Government of the United States to the St. Lawrence River Power Co. that the notifying Government objects to the further maintenance of the weir. Then the weir application must be renewed unless the company applied to the Commissioner and obtains an approval for continuance of the weir; this approval being subject to the following conditions:
- (1) Diversion by the Massena Power Canal not to exceed 25,000 c.f.s., unless a bigger divergence, in the opinion of the Board of Control, will not injuriously affect navigation.
  - (2) The company must provide sluices to protect injury from floods and also repair and make tight the weir.
  - (3) The sluices, etc. are to be under the jurisdiction of a Board of Control composed of two engineers, one appointed by each of the two Governments.
- 1923 CY. Rapide Plat Canal: September -Contractor commenced the improvement of the upper entrance to the Canal, consisting of widening on north side from the south entrance pier upstream to Robertson's Point, a distance of half a mile, and the removal of a small shoal.
1924. Massena Power Canal: The submerged weir, which consisted of a rock fill, either settled or had its upper layer of rock dislodged by ice. As such, it was found necessary to put more rock on the weir. Work started on August 25, 1923 and was completed on October 20, 1923; the crest of the weir being brought up to a general elevation of about 200 with an average top width of about 8 or 10 ft., and an upstream slope of approximately 45 degrees. At approximately the center of the weir, a channel of about 4 ft. deep and 40 ft wide, with a slight downstream slope was left to carry off the ice.
- 1924 CY. Cornwall Canal: Work commenced on the raising of banks, roads and walls, about 18 inches to 2 ft., above the Guard Gate to Lock 21 (completed in 1925).
- 1925 CY. Massena Power Canal: During 1925, the crest of the weir in the South Sault was brought up to grade and reinforced with field stone at points where it had been damaged by ice thrust during the proceeding winter; also, considerable material was placed on the upstream face for the purpose of making it more watertight.
1927. Massena Power Canal: On July 14, 1927, the St. Lawrence River Power Co. filed, with the Chief of Engineers, U.S. Army, at Washington, D.C., an application for the permission to raise the crest of its weir, from its present level at elevation 200.0 ft.



to elevation 206.0, ft. sea level datum. On January 3, 1928, a similar application was made to the Secretary of State, Washington, D.C.. Coincident with the raising of the weir, the company proposed to install, adjacent to the jetty at the weir, three sluice gates having a maximum combined discharge capacity of 50,000 c.f.s.. Authorization to install these sluice gates was issued by the International Joint Commission, under interim order date December 6, 1927. (Sluice gates 3-50; gates sills at elevation 180).

1928. Beauharnois Light, Heat & Power Co.: January 27, company applied to Governor-in-Council for approval of work to divert 40,000 c.f.s.

1929. Beauharnois Light, Heat & Power Co.: March 8, P.C. 422 granted application of company of January 27, 1928.

1930. Beauharnois Light, Heat & Power Co.: November 6, 1929, Order-in-Council passed approving of transfer of Montreal Cotton leases to Beauharnois Light, Heat & Power Co..

1932. Beauharnois Light, Heat & Power Co.: August 3, 1931, Chapters 19 and 20 of Statutes of Canada, cancelled P.C. 422; granted company right to divert 53,072 c.f.s. and declared works to be for the general advantage of Canada. These statutes were to come into force on March 1, 1932.

Beauharnois Light, Heat & Power Co.: March 1, 1932, P.C. 504 authorized entry into agreement with Beauharnois Light, Heat & Power Co..

Lachine Rapids Hydraulic and Land Co.: The plant was completely closed on December 31.

Beauharnois Light, Heat & Power Co.: March 1, 1932, Agreement No. 28971 between Beauharnois Light, Heat & Power Co. and His Majesty.

1932 CY. Beauharnois Light, Heat & Power Co.: May, work started on Control dam in canal; July, certain dykes settled; September, control weir in canal completed; September, Hungry Bay Dyke breached, water level in canal held to elevation 146.0 ft.; October, first power delivered from power house; November, water level in canal raised to elevation 148.0 ft.

Caughnawaga Bridge: Contract let for substructure, in November 1932.

1933. Beauharnois Light, Heat & Power Co.: April, construction of Coteau Rapids Control Works started.



- 1933 CY. Caughnawaga Bridge: Substructure completed on November 1, 1933.
1934. Cornwall Canal: Construction began on a 14-ft. deep canal to bypass the Long Sault Rapids.
- 1934 CY. Beauharnois Light, Heat & Power Co.: Cedar Rapids Remedial Works started and completed.
1935. Beauharnois Light, Heat & Power Co.: February, water level in canal raised to elevation of 150.0 ft.
1936. Beauharnois Light, Heat & Power Co.: October 23, 1935; H.E.P.C. of Ontario cut off load.
1938. Beauharnois Light, Heat & Power Co.: November, 1937; H.E.P.C. of Ontario resumed contract cancelled in 1935.
1940. Beauharnois Light, Heat & Power Co.: October 1939; all restriction on water levels in canal removed.
1941. Beauharnois Light, Heat & Power Co.: July 12, 1940, Chapter 20 of Statutes of 1940 assented to increase in diversion of 30,000 c.f.s.; July 18, 1940, P.C. 3210 authorized entry into agreement with Beauharnois Light, Heat & Power Co. regarding additional 30,000 c.f.s.; July 18, 1940, agreement 32060 between Beauharnois Light, Heat & Power Co. and His Majesty.
1942. Beauharnois Light, Heat & Power Co.: December 6, 1941, P.C. 9439 authorized Company to raise low water level (L.W.L.) of Lake St. Francis to an elevation of 152.0 ft. until October 1, 1942.
1943. Cedar Rapids Manufacturing and Power Co.: May 11; Order-in-Council (P.C. 3867) authorized increase in diversion to 75,000 c.f.s. through the year.
- Beauharnois Light, Heat & Power Co.: November 6, 1942, P.C.10065 extended time during which company could maintain L.W.L. of Lake St. Francis at an elevation of 152.0 ft., until October 1, 1943.
- Cedar Rapids Manufacturing and Power Co.: November 19, 1942; Order-in-Council (P.C. 10547) authorized Montreal Light, Heat and Power Consolidated to assume obligations of the Cedar Rapids Manufacturing and Power Co. in so far as agreements with Dominion Government were concerned.

1943 CY. Beauharnois Light, Heat & Power Co.: April 29, P.C. 3431 authorized extension of control dam in canal. October 26, P.C. 8316 extended time during which company could maintain L.W.L. of Lake St. Francis at an elevation of 152.0 ft., until October 1, 1944. November, all works in Coteau Rapids completed.

1944 CY. Beauharnois Light, Heat & Power Co.: April 15, Quebec Hydro Electric Commission appointed, which took over control and operation of Beauharnois Light, Heat & Power Company. September 15, P.C. 7599 extended time during which company could maintain L.W.L. of Lake St. Francis at elevation 152.0 ft., until October 1, 1945 and thereafter from year to year subject to termination at any time. December 27, P.C. 9552 authorized removal of control dam in canal.

1947. Beauharnois Light, Heat & Power Co.: June 27, Act of Parliament granted company right to divert all water from river subject to conditions laid down by Order-in-council.

1948. Beauharnois Light, Heat & Power Co.: March 16, P.C. 1084 authorized additional diversion of 80,000 c.f.s.

Cedar Rapids Manufacturing and Power Co.: March 16, P.C. 1050 transferred administration of Cedars from Dept. of Public Works (P.W.) to Transport.

Provincial Light, Heat and Power Co.: October 7, 1947; May 1, 1901 Lease No. 14245, assigned to Provincial Light, Heat and Power Co. in 1904, was cancelled as of April 15, 1944.

1949. Old Beauharnois Canal: June 2, P.C. 2749, the lease to the Canadian Light & Power Co. was surrendered and authority was granted to enter into a contract with Quebec Hydro for the use of the canal from July 1, 1949 to December 31, 1952.

1953. Gut Dam: Removed in January 1953.

1954 CY. Saint Lawrence Seaway: Wiley-Dondero Act (or Seaway Act) passed by U.S. Congress.

An agreement was reached between the U.S. and Canada concerning the construction of the Saint Lawrence Seaway; to provide deep water navigation works with a controlling depth of 27 ft. in channels and canals between Montreal, Quebec and Lake Erie.

1955. Saint Lawrence Seaway: Ground was broken in April 1955 for a excavation of a 10 mile Wiley-Dondero Canal (Long Sault Canal) and the construction of the Eisenhower and Snell Locks.

1956 CY. Saint Lawrence Seaway: Dredging commenced in the Thousand Islands Section and in the downstream approach to the Snell Lock.

1957 CY. Saint Lawrence Seaway: Dredging commenced in the South Cornwall Channel.

Saint Lawrence Seaway: Construction started and completed on Training Dike "B", a curved rock structure to the north side of the navigation channel below the Snell Lock.

1958 CY. Saint Lawrence Seaway: The creation of a power pool (Lake St. Lawrence) commenced on July 1, 1958. The power pool flooded out existing Canadian 14 ft. canal facilities along the north shore in the section of the St. Lawrence River above Cornwall, Ontario, Canada.

Saint Lawrence Seaway: The Seaway was unofficially opened, on July 4, 1958, in the International Section of the river, in order to accommodate 14 ft. vessels; resulting from the closure of the Canadian north shore canal system.

Saint Lawrence Seaway: Iroquois Dam completed; Long Sault Dam completed; Moses-Saunders Dam and Powerhouses completed.

1959 CY. Saint Lawrence Seaway: The Seaway was opened to deep draft navigation on April 25, 1959.

The widening and deepening of the navigation channel to 25 ft. was completed.

Saint Lawrence Seaway: The Seaway was officially dedicated on June 26, 1959 by Queen Elizabeth II and President Eisenhower at the Seaway's Montreal entrance below the St. Lambert Lock, Canada.

Saint Lawrence Seaway: Seaway dedication ceremonies were held at the Eisenhower Lock (U.S.), on June 27, 1959; attended by Queen Elizabeth II and Vice President Nixon.

Saint Lawrence Seaway: All land construction was completed as of December 31, 1959.

1960. Saint Lawrence Seaway: Dredging operations continued in sections of the Cornwall Island portion of the project. The waterway has been operative, during the navigation season to a 27 ft. depth, since the former dedication of June 26 and 27, 1959.

1961. Saint Lawrence Seaway: Dredging operations in sections of the Cornwall Island portion of the project were completed in November 1960. Corps of Engineers construction responsibility for the project was completed.
- 1963 CY. Saint Lawrence Seaway: Construction of Spur Dike "A", below Polly's Gut and north of the downstream guide wall at Snell Lock, completed.
- 1976 CY. Saint Lawrence Seaway: Spur Dike "A", below Polly's Gut extended.

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Saint Lawrence Seaway: Routine maintenance dredging an ongoing program.